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## Case Report

# A Rare Presentation of Hepatocellular Carcinoma

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## ABSTRACT

**Background:** HCV is a most common etiological factor that cause the hepatocellular carcinoma .Most common sites of its metastasis are lungs, bones, lymphatics and brain but it rarely metastasizes to the chest wall.

**Case Presentation:** A patient with hepatocellular carcinoma presented to us with an isolated metastatic mass on the right posterolateral chest wall inferiorly and was later on confirmed on histology.

**Conclusions:** If a primary tumour cannot be identified radio logically, particularly in a patient with chronic liver disease, metastasis of HCC should be included in differential diagnosis of rapidly growing lesions in unusual localization.

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## CASE PRESENTATION

A 70 year old man admitted to our hospital through out patient department with a swelling in the right posterolateral (infra scapular) chest wall, weight loss and weakness. Six months back, he had noticed a fixed mass of approximately 5x6 cm which had grown rapidly and become painful during exertion. There was no history of respiratory illness, fever and night sweats. Physical examination revealed a fixed, non tender mass of 5x6 cm in the right posterolateral thorax. Liver was slightly enlarged. Laboratory findings indicate anaemia, wt loss and jaundice. Hepatitis C surface antigen, IgG antibody to core antigen, anti-HBe and HCV DNA with polymerase chain reaction was positive. HBe antigen, anti delta and serological markers of hepatitis B were negative. Ultra sound abdomen showed heterogenous echogenic patterns in the liver. CT scan of the thorax revealed a soft tissue on the right posterolateral chest wall. Biopsy taken from the soft tissue mass showed us metastatic hepatocellular carcinoma. CT scan of the abdomen showed the diffuse heterogenous involvement of the liver parenchyma with irregular border and without clear HCC characteristics on CT scan. CT scan of thorax, abdomen and pelvis also revealed that there was no Lymphadenopathy. After appropriate counselling the patient was discharged on palliative treatment.

## DISCUSSION

Retrospective study showed the extra hepatic metastasis of HCC in 18 % of the untreated patients, metastatic lesions were found mostly in an autopsy

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study of deaths related to primary liver cancer<sup>1,2</sup>. Lungs, lymph nodes, adrenal glands and bones are the most common sites of extra hepatic involvement<sup>1,3,4,5,6</sup>. HCC mostly metastasize frequently through intrahepatic blood vessels, lymphatic or direct infiltration. Haematogenous spread occurs due to the involvement of the hepatic or portal veins or inferior vena cava. Metastases have also been found in collaterals and varices and this appears to have been the route of metastasis in the patient reported here. Tumour cells finally invade the intercostals veins by passing through the right thoracic wall via portosystemic collaterals, the azygous system. The other possible route is via subcutaneous collaterals communicating to thoracoepigastric veins and draining into the axillary vein. Only 10% of the patients show the bone metastasis, it infrequently appears as the first manifestation of HCC<sup>7</sup>. Vertebrae and pelvis are the most commonly involved sites<sup>8</sup>. But metastasis to the ribs occurs rarely<sup>9,10</sup>.

If primary tumour remains unidentified, it becomes problematic to diagnose the metastatic HCC. According to our knowledge only two cases of solitary metastasis to the chest wall from an unknown primary HCC have been reported. One of the patients had an HCC metastasis involving sternum and the other had a metastasis on the right 4<sup>th</sup> rib<sup>9,10</sup>.

In the patient presented to us, chronic hepatitis was the etiological factor responsible for HCC and it was diffuse in nature. Yuki et al reported the relationship between the HCs antigen positivity and diffuse type HCC. Metastasis via intrahepatic, haematogenous and lymphatic channels has been mostly observed in diffuse type HCC<sup>11</sup>.

Due to the permeative appearance and heterogeneity of background chronic live disease, the

diffuse type HCC is often difficult to detect radiologically<sup>12</sup>. In this patient HCC was of diffuse type and only single site of metastasis. Regional lymph nodes were not involved. AFP, when elevated usually related with tumour size. The AFP doubling time shows the tumour doubling time. In our patient, a rapidly growing axillary mass, diffuse infiltration of the liver by the tumour is consistent with these observations. However, about one fourth of the patients have normal values of the AFP<sup>12</sup>. In our patient, the need for the biopsy might be questionable. The HCC was highly suggested by the presence of chronic liver disease plus the high levels of AFP. Ectopic HCC without a liver origin are described in several reports.

The treatment of these patients can be the surgical resection and the prognosis is good [13, 14]. Furthermore, many reports have claimed that the predisposing factor for the development of the HCC is the ectopic livers<sup>14,15</sup>.

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